

NMCP COVID-19 Literature Report #23: Friday, 19 June 2020

Prepared By: Tracy Shields, MSIS, AHIP <tracy.c.shields2.civ@mail.mil>

Reference Medical Librarian; Naval Medical Center Portsmouth, Library Services

Disclaimer: I am not a medical professional. This document is current as of the date noted above. While I make every effort to find and summarize available data, things are changing rapidly, with new research and potentially conflicting literature published daily. Best practice and evidence are constantly shifting during this international public health crisis.

Reports are biweekly, planned for Tuesdays and Fridays.

Statistics

Global 8,519,543 confirmed cases and 454,522 deaths in 188 countries/regions

*United States** top 5 states by cases (Virginia is ranked 12th)

	TOTAL US	NY	NJ	CA	IL	MA
Confirmed Cases	2,191,371	385,760	168,107	167,234	134,778	106,422
Tested	25,403,498	3,179,660	1,171,734	3,074,530	1,284,693	741,260
Recovered	NA	69,243	29,101	NA	NA	NA
Deaths	454,522	30,974	12,869	5,356	6,537	7,769

*see census.gov for current US Population data; NA: not all data available

[JHU CSSE](https://jhu-csse.org) as of 1000 EDT 19 June 2020

Navy (Department of Defense)

	TOTAL	MIL	CIV	DEP	CTR
Cases	534	335	102	43	64
Hospitalized	9	5	1	1	2
Recovered	3,168	2,742	383	174	139
Deaths	12	1	8	0	3
Cumulative*	3,714	2,808	493	217	196

*cumulative total = active + recovered + deaths

[DOD](https://dod.defense.gov) dated 18 June 2020

<i>Virginia</i>	Total	Chesapeake	Hampton	Newport News	Norfolk	Portsmouth	Suffolk	Virginia Beach
Cases	56,793	709	252	410	707	405	353	950
Hospitalized	5,797	105	37	44	89	60	53	112
Deaths	1,602	16	5	10	7	13	34	27

[VA DOH](https://va.doh.gov) as of 1000 EDT 19 June 2020

Evidence Synthesis and Other Reports

[CEBM](#): Transmission Dynamics of COVID-19 (18 June 2020)

"In the midst of the COVID-19 pandemic, uncertainty on the characteristics of a novel disease reigns. One of the most important aspects of these uncertainties regards the mode and circumstances of transmission of this newly identified agent.

The explosive nature of COVID-19 transmission, initially shown by the number of new cases and later by admissions and deaths, remains unexplained. The age distribution and the speed of transmission does not fit with what is known of "seasonal" coronaviridae.

Such uncertainties prevent a rational response to the threat and promote extreme actions such as total lockdown of whole countries. One of the principal uncertainties regards the means by which COVID-19 is transmitted, with special regard to the factors which may accelerate or delay its spread, the mode of transmission, the role of asymptomatic infected people, its speed, the possible interactions with wildlife or livestock, urban or rural environments and population density.

The first part of the Open Evidence Synthesis will consist of a search of the evidence and description with tabulation of the findings. In the second phase, as we make more information available, it may be possible to either define a mode of transmission or to set out a series of hypotheses to be tested by further work. We will set out the policy implications and recommendations in line with our evidence extractions.

Because of the public health importance of this work and its evolving nature, we will post extractions and summaries of all included studies on this site with brief comments. We post summaries as soon as they are available, we source the evidence continually and update our database searches every two weeks."

[JHCHS](#): Developing a National Strategy for SARS-CoV-2 Serosurveys in the United States (18 June 2020)

"This document describes the value of serosurveys (antibody studies) for SARS-CoV-2 infections, the different methods by which they can be performed, and the resources required to produce actionable information. It provides recommendations for the US government and states for performing these studies and deriving value from them."

Selected Primary Literature

Recent—published in peer-reviewed journals within the last 7 days of report's date

[JAMA Otolaryngol Head Neck Surg](#): Prevalence of Taste and Smell Dysfunction in Coronavirus Disease 2019 (18 June 2020)

"Findings: This survey study of 204 patients with coronavirus disease 2019 found that taste reduction was present in 55.4% of patients, whereas smell reduction was present in 41.7% of patients. Severe nasal obstruction was uncommon at the onset of the disease (7.8%).

Meaning: The findings suggest that coronavirus disease 2019 should be suspected when severe reduction of taste and smell are present in the absence of nasal obstruction."

[JAMA Netw Open](#): Disparities in Coronavirus 2019 Reported Incidence, Knowledge, and Behavior Among US Adults (18 June 2020)

"Findings: In this survey study, the largest differences in coronavirus disease 2019–related knowledge and behaviors were associated with race/ethnicity, sex, and age. African American participants, men, and people younger than 55 years were less likely to know how the disease is spread, were less likely to know the symptoms of coronavirus disease 2019, washed their hands less frequently, and left the home more often.

Meaning: These findings suggest that more effort is needed to increase accurate information and encourage appropriate behaviors among minority communities, men, and younger people."

[Nature](#): Convergent antibody responses to SARS-CoV-2 in convalescent individuals (18 June 2020; previously posted on [bioRxiv](#) on 22 May 2020)

"During the COVID-19 pandemic, SARS-CoV-2 infected millions of people and claimed hundreds of thousands of lives. Virus entry into cells depends on the receptor binding domain (RBD) of the SARS-CoV-2 spike protein (S). Although there is no vaccine, it is likely that antibodies will be essential for protection. However, little is known about the human antibody response to SARS-CoV-2. Here we report on 149 COVID-19 convalescent individuals. Plasmas collected an average of 39 days after the onset of symptoms had variable half-maximal pseudovirus neutralizing titres: less than 1:50 in 33% and below 1:1,000 in 79%, while only 1% showed titres above 1:5,000. Antibody sequencing revealed expanded clones of RBD-specific memory B cells expressing closely related antibodies in different individuals. Despite low plasma titres, antibodies to three distinct epitopes on RBD neutralized at half-maximal inhibitory concentrations (IC₅₀ values) as low as single digit nanograms per millilitre. Thus, most convalescent plasmas obtained from individuals who recover from COVID-19 do not contain high levels of neutralizing activity. Nevertheless, rare but recurring RBD-specific antibodies with potent antiviral activity were found in all

individuals tested, suggesting that a vaccine designed to elicit such antibodies could be broadly effective."

[JAMA Intern Med](#): Prone Positioning in Awake, Nonintubated Patients With COVID-19 Hypoxemic Respiratory Failure (17 June 2020)

"This case series describes the proportion of awake, nonintubated inpatients with COVID-19 and hypoxemic respiratory failure requiring oxygen supplementation whose Pao₂ increased ≥20% with prone positioning, and their respiratory status after resuming supine positioning."

See also commentary:

<https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2767574>

[JAMA Health Forum](#): Protecting the Health of Vulnerable Children and Adolescents During COVID-19–Related K-12 School Closures in the US (17 June 2020)

The authors offer recommendations to mitigate adverse health consequences of school closures for vulnerable pediatric patients.

"Each recommended action requires creative problem-solving, cross-sector collaboration, community partnerships, and most importantly, resources. Although health system funding for COVID-19 has increased, state education budgets are in crisis, and the social supports described here are most likely to be eliminated under budget cuts. A large influx of federal aid targeting the most economically disadvantaged schools and districts can pave a path forward."

[MMWR](#): Characteristics Associated with Hospitalization Among Patients with COVID-19 — Metropolitan Atlanta, Georgia, March–April 2020 (17 June 2020)

"Hospitalized COVID-19 patients are more commonly older, male, of black race, and have underlying conditions. Less is known about factors increasing risk for hospitalization.

Data for 220 hospitalized and 311 nonhospitalized COVID-19 patients from six metropolitan Atlanta hospitals and associated outpatient clinics found that older age, black race, diabetes, lack of insurance, male sex, smoking, and obesity were independently associated with hospitalization.

To reduce severe outcomes from COVID-19, measures to prevent infection with SARS-CoV-2 should be emphasized for persons at highest risk for hospitalization with COVID-19. Potential barriers to the ability to adhere to these measures need to be addressed."

[NEJM](#): Genomewide Association Study of Severe Covid-19 with Respiratory Failure (17 June 2020)

"We conducted a genomewide association study involving 1980 patients with Covid-19 and severe disease (defined as respiratory failure) at seven hospitals in the Italian and Spanish epicenters of the SARS-CoV-2 pandemic in Europe. After quality control and the exclusion of population outliers, 835 patients and 1255 control participants from Italy and 775 patients and 950 control participants from Spain were included in the final analysis. In total, we analyzed 8,582,968 single-nucleotide polymorphisms and conducted a meta-analysis of the two case-control panels....

We identified a 3p21.31 gene cluster as a genetic susceptibility locus in patients with Covid-19 with respiratory failure and confirmed a potential involvement of the ABO blood-group system."

[NEJM](#): Hidden in Plain Sight — Reconsidering the Use of Race Correction in Clinical Algorithms (17 June 2020)

"Our understanding of race has advanced considerably in the past two decades. The clinical tools we use daily should reflect these new insights to remain scientifically rigorous. Equally important is the project of making medicine a more antiracist field. This involves revisiting how clinicians conceptualize race to begin with. One step in this process is reconsidering race correction in order to ensure that our clinical practices do not perpetuate the very inequities we aim to repair."

[Clin Infect Dis](#): Prevalence of COVID-19 Infection and Outcomes Among Symptomatic Healthcare Workers in Seattle, Washington (16 June)

"We established two high-throughput employee testing centers in Seattle, Washington with drive-through and walk-through options for symptomatic employees in the University of Washington Medicine system and its affiliated organizations. Using data from these testing centers, we report the prevalence of SARS-CoV-2 infection among symptomatic employees and describe the clinical characteristics and outcomes among employees with COVID-19.

Between March 12 and April 23, a total of 3,477 symptomatic employees were tested for COVID-19 at two employee testing centers; 185 (5.3%) employees tested positive for COVID-19. The prevalence of SARS-CoV-2 was similar when comparing frontline HCWs (5.2%) to non-frontline staff (5.5%). Among 174 positive employees reached for follow-up at least 14 days after diagnosis, 6 reported COVID-related hospitalization; all recovered.

During the study period, we observed that the prevalence of positive SARS-CoV-2 tests among symptomatic HCWs was comparable to that of symptomatic non-frontline staff. Reliable and rapid access to testing for employees is essential to preserve the health, safety, and availability of the healthcare workforce during this pandemic and to facilitate the rapid return of SARS-CoV-2 negative employees to work."

[Phys Fluids](#): On respiratory droplets and face masks (16 June 2020)

BLUF: mild coughing can expel small saliva droplets through and around a face mask and travel as far as 1 meter (3.3 feet)

"Face mask filters—textile, surgical, or respiratory—are widely used in an effort to limit the spread of airborne viral infections. Our understanding of the droplet dynamics around a face mask filter, including the droplet containment and leakage from and passing through the cover, is incomplete. We present a fluid dynamics study of the transmission of respiratory droplets through and around a face mask filter. By employing multiphase computational fluid dynamics in a fully coupled Eulerian–Lagrangian framework, we investigate the droplet dynamics induced by a mild coughing incident and examine the fluid dynamics phenomena affecting the mask efficiency. The model takes into account turbulent dispersion forces, droplet phase-change, evaporation, and breakup in addition to the droplet–droplet and droplet–air interactions. The model mimics real events by using data, which closely resemble cough experiments. The study shows that the criteria employed for assessing the face mask performance must be modified to take into account the penetration dynamics of airborne droplet transmission, the fluid dynamics leakage around the filter, and reduction of efficiency during cough cycles. A new criterion for calculating more accurately the mask efficiency by taking into account the penetration dynamics is proposed. We show that the use of masks will reduce the airborne droplet transmission and will also protect the wearer from the droplets expelled from other subjects. However, many droplets still spread around and away from the cover, cumulatively, during cough cycles. Therefore, the use of a mask does not provide complete protection, and social distancing remains important during a pandemic. The implications of the reduced mask efficiency and respiratory droplet transmission away from the mask are even more critical for healthcare workers. The results of this study provide evidence of droplet transmission prevention by face masks, which can guide their use and further improvement."

[Lancet Glob Health](#): Global, regional, and national estimates of the population at increased risk of severe COVID-19 due to underlying health conditions in 2020: a modelling study (15 June 2020)

"This study combines evidence from large international databases and new analyses of large multimorbidity studies to inform policy makers about the number of individuals that might be at increased risk or high risk of severe COVID-19 in different countries. We developed a tool for rapid assessments of the number and percentage of country populations that would need to be targeted under different policies to protect those at increased risk.

Estimating the number of people at increased risk of severe COVID-19 is crucial to help countries to design more effective interventions to protect vulnerable individuals and reduce pressure on health systems. This information can also inform a broader assessment of the health, social, and economic implications of shielding various groups."

[Science](#): Antibody cocktail to SARS-CoV-2 spike protein prevents rapid mutational escape seen with individual antibodies (15 June 2020)

"Antibodies targeting the spike protein of SARS-CoV-2 present a promising approach to combat the COVID19 pandemic; however, concerns remain that mutations can yield antibody resistance. We investigate the development of resistance against four antibodies to the spike protein that potentially neutralize SARS-CoV-2, individually as well as when combined into cocktails. These antibodies remain effective against spike variants that have arisen in the human population. However, novel spike mutants rapidly appeared following in vitro passaging in the presence of individual antibodies, resulting in loss of neutralization; such escape also occurred with combinations of antibodies binding diverse but overlapping regions of the spike protein. Importantly, escape mutants were not generated following treatment with a non-competing antibody cocktail."

ICYMI—recent literature published earlier than 7 days ago, not previously covered

[BJOG](#): Maternal transmission of SARS-COV-2 to the neonate, and possible routes for such transmission: A systematic review and critical analysis (12 June 2020)

"We included 49 studies which included 666 neonates and 655 women where information was provided on the mode of delivery and the infant's infection status.

28/666 (4%) neonates had confirmed COVID-19 infection postnatally. Of the 291 women who delivered vaginally, 8/292 (2.7%) neonates were positive. Of the 364 women who had a Caesarean birth, 20/374 (5.3%) neonates were positive.

Of the 28 neonates with confirmed COVID-19 infection, 7 were breast fed, 3 formula fed, 1 was given expressed breast milk and in 17 neonates the method of infant feeding was not reported.

Neonatal COVID-19 infection is uncommon, uncommonly symptomatic, and the rate of infection is no greater when the baby is born vaginally, breastfed or allowed contact with the mother."

[Lancet Infect Dis](#): SARS-CoV-2 shedding and seroconversion among passengers quarantined after disembarking a cruise ship: a case series (12 June 2020)

"To our knowledge, this is the first cruise ship study of the clinical evolution and seroconversion from coronavirus disease 2019 (COVID-19) from last possible exposure to the pathogen to the end of the suspected incubation period. The study showed that asymptomatic individuals might seroconvert while carrying a high viral load and continue to shed the virus. Patients who had viral pneumonitis detected by high-resolution CT tended to have a higher antibody response. High-resolution CT also helped to establish a clinical diagnosis and detect cases of asymptomatic lung infection.

Asymptomatic COVID-19 infection with continuous viral shedding makes infection control difficult. Therefore, a combination of RT-PCR and serology should be implemented for case finding and contact tracing in a community outbreak of COVID-19 to facilitate early diagnosis, prompt isolation, and treatment. High-resolution CT could also help to detect cases of asymptomatic infection."

[Lancet Infect Dis](#): Clinical characteristics of COVID-19 in 104 people with SARS-CoV-2 infection on the Diamond Princess cruise ship: a retrospective analysis (12 June 2020)

"To our knowledge, this is the first study showing the predictors of symptomatic illness in people infected with SARS-CoV-2. We present a summary of the clinical characteristics of 104 participants with laboratory-detected SARS-CoV-2 infection as a result of mass infection on the Diamond Princess cruise ship who were treated at Self-Defense Forces Central Hospital, Japan, from Feb 11 to Feb 25, 2020. Serum lactate dehydrogenase concentrations were significantly higher in patients who were initially asymptomatic on admission to the hospital and developed symptomatic COVID-19 during the observation period than in those who remained asymptomatic throughout. Older age, consolidation on chest CT images, and lymphopenia on admission were more frequent in patients with severe COVID-19 than those with mild COVID-19 at the end of observation, and thus could be potential risk factors for disease progression.

More than 70% of our patients with SARS-CoV-2 infection had asymptomatic or mild disease. However, massive increase in case numbers has led to the collapse of health-care systems. Combining clinical and laboratory findings with chest CT imaging could help to identify people who are at risk of symptom onset and clinical deterioration."

Preprints—not yet peer-reviewed papers

*[bioRxiv](#) and *[medRxiv](#) are preprint servers: "[T]hese are preliminary reports that have not been peer-reviewed. They should not be regarded as conclusive, guide clinical practice/health-related behavior, or be reported in news media as established information."

[bioRxiv](#): COVID-19 PCR Test Performance For Samples Stored At Ambient Temperature (18 June 2020)

"Background: The new type of Coronavirus infection had become a pandemic in a very short period since it was first seen in Wuhan. The outbreak had a negative impact on all health care systems throughout the world and overwhelmed the diagnostic laboratories as well. During the pandemic, handling patient specimens in accordance with the universal guidelines was troublesome as WHO, CDC and ECDC required cold chain compliance during transporting and storing the swap samples.

Materials and methods: In this study, we tested diagnostic performance of RT-PCR on 30 swab samples stored at ambient temperature and compared them with the samples stored at +4°C.

Results: Our results revealed that all the samples stored at ambient temperature remain PCR positive for at least five days. We did not see any false negativity.

Conclusion: In conclusion, we report that transferring and storing of nasopharyngeal/oropharyngeal samples at ambient temperature could be possible in the resource-limited conditions like pandemic."

In Brief

Need to know when, why, and how to wear a mask? Here is what experts say ([WashPo](#)).

A study of wastewater collected in December 2019 suggests that the coronavirus was circulating in northern Italy before reports of the first cases in China ([Reuters](#)).

The Thing About Waves Is That They Keep Coming

Beijing is battling a second wave of coronavirus cases by shutting schools and cutting off flights ([WashPo](#)) as other countries still grapple with the first outbreak—the pandemic is far from over ([WashPo](#)).

Rising case numbers, not enough contact tracers, political and social disruptions, inconsistency with mitigation efforts—there's a long road ahead for all of us with the coronavirus ([STAT](#)).

If the virus slows this summer and acts like other seasonal virus, we could be in real trouble ([Wired](#)).

Testing, Treatment, Recovery, and Vaccines

The government paid millions for test tubes meant for coronavirus testing kits and got unusable (and likely contaminated) mini soda bottles instead ([ProPublica](#)).

A cluster of cases and outbreaks in Mississippi have been linked to fraternity rush parties ([CNN](#)).

Eli Lilly will begin a phase 3 trial of baricitinib, a janus kinase (JAK) inhibitor FDA-approved to treat rheumatoid arthritis, as possible therapy for COVID-19 ([CNN](#)).

"The front lines of the COVID-19 fight have shifted from ICUs to wards where the sickest patients relearn how to walk and eat without choking" ([NYT](#)).

Long read: It is likely we'll eventually have a coronavirus vaccine—but perhaps not as quickly as some expect, and not without tremendous challenges ([ProPublica](#)).

Disparities

The race to find a coronavirus vaccine could leave less-wealthy countries behind, leading international relief and support organizations to warn of inequities and calls for parity ([AP](#)).

The continuing legacy of the 1910 Flexner Report, which forced all but 2 Black US medical schools to close after its release, is one reason why racial bias permeates medical education ([Medpage](#)).

Unexpected Consequences

Dr. Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases: "Unless [NFL] players are essentially in a bubble – insulated from the community and they are tested nearly every day – it would be very hard to see how football is able to be played this fall. If there is a second wave, which is certainly a possibility and which would be complicated by the predictable flu season, football may not happen this year." ([CNN](#))

If you've had a jigsaw puzzle addiction during the pandemic lockdown, you aren't alone; some folks are paying as much as \$4,500 for one-of-a-kind jigsaw puzzles and causing a boom for one small business ([NYT](#)).

Maybe expensive puzzles are behind the new crisis the coronavirus pandemic is responsible for: a nationwide shortage of quarters, dimes, nickels and pennies ([WashPo](#)).

That's... Really Not Good

There is a cluster of bubonic and septicemic plague in the Democratic Republic of Congo (DRC): "As of 16 Jun 2020, of the 10 cases (of which 4 deaths were reported), 8 were diagnosed with bubonic plague and 2 were diagnosed with septicemic plague" ([ProMED](#)).

The DRC is still dealing with an Ebola outbreak (along with COVID-19 and a measles epidemic), with 17 new cases and 11 deaths reported earlier this week ([Aljazeera](#)).

References

Statistics

DOD: Department of Defense, Navy. US Navy COVID-19 updates (accessed 28 April 2020). Link: <https://navylive.dodlive.mil/2020/03/15/u-s-navy-covid-19-updates/>

JHU CSSE: Johns Hopkins Center for Systems Science and Engineering. Coronavirus COVID-19 Global Cases. Link: <https://coronavirus.jhu.edu/map.html>

VA DOH: Virginia Department of Health. COVID-19 in Virginia, updated daily. Link: <http://www.vdh.virginia.gov/coronavirus/>

Evidence Synthesis and Other Reports

CEBM: Centre for Evidence-Based Medicine, University of Oxford. Jefferson T, Spencer EA, Plüddemann A, Roberts N, Heneghan C. Analysis of the Transmission Dynamics of COVID-19: An Open Evidence Review (posted 18 June 2020). Link: <https://www.cebm.net/evidence-synthesis/transmission-dynamics-of-covid-19/>

JHCHS: Johns Hopkins Center for Health Security. Gronvall G, Connell N, Farley JE, et al. Developing a National Strategy for SARS-CoV-2 Serosurveys in the United States. Baltimore, MD; 2020. (posted 18 June 2020). Link: <https://www.centerforhealthsecurity.org/our-work/publications/developing-a-national-strategy-for-sars-cov-2-serosurveys-in-the-united-states>

Selected Primary Literature

bioRxiv: Nihat Bugra Agaoglu, Jale Yıldız, Ozlem Akgun Dogan, Gizem Alkurt, Betsi Kose, Yasemin Kendir Demirkol, Arzu Irvem, Levent Doganay, Gizem Dinler-Doganay. COVID-19 PCR Test Performance For Samples Stored At Ambient Temperature (18 June 2020). bioRxiv 2020.06.15.153882; doi: <https://doi.org/10.1101/2020.06.15.153882> Link: <https://www.biorxiv.org/content/10.1101/2020.06.15.153882v1>

BJOG: Walker KF, O'Donoghue K, Grace N, Dorling J, Comeau JL, Li W, Thornton JG. Maternal transmission of SARS-COV-2 to the neonate, and possible routes for such transmission: A systematic review and critical analysis. BJOG. 2020 Jun 12. doi: 10.1111/1471-0528.16362. Epub ahead of print. PMID: 32531146. Link: <https://obgyn.onlinelibrary.wiley.com/doi/abs/10.1111/1471-0528.16362>

Clin Infect Dis: Mani NS, Budak JZ, Lan KF, Bryson-Cahn C, Zelikoff A, Barker GEC, Grant CW, Hart K, Barbee CJ, Sandoval MD, Dostal CL, Corcorran M, Ungerleider HM, Gates JO, Olin SV, Bryan A, Hoffman NG, Marquis SR, Harvey ML, Nasenbeny K, Mertens K, Chew LD, Greninger AL, Jerome KR, Pottinger PS, Dellit TH, Liu C, Pergam SA, Neme S, Lynch JB, Kim HN, Cohen SA. Prevalence of COVID-19 Infection and Outcomes Among Symptomatic Healthcare Workers in Seattle, Washington. Clin Infect Dis. 2020 Jun 16:ciaa761. doi: 10.1093/cid/ciaa761. Epub ahead of print. PMID: 32548613. Link: <https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciaa761/5858272>

JAMA Health Forum: Martin EG, Sorensen LC. Protecting the Health of Vulnerable Children and Adolescents During COVID-19–Related K-12 School Closures in the US (17 June 2020) JAMA Health Forum. Link: <https://jamanetwork.com/channels/health-forum/fullarticle/2767411>

JAMA Intern Med: Elharrar X, Trigui Y, Dols AM, Touchon F, Martinez S, Prud'homme E, Papazian L. Use of Prone Positioning in Nonintubated Patients With COVID-19 and Hypoxemic Acute Respiratory Failure. JAMA. 2020 May 15;323(22):2336–8. doi: 10.1001/jama.2020.8255.

Epub ahead of print. PMID: 32412581; PMCID: PMC7229532. Link:

<https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2767575>

JAMA Netw Open: Alsan M, Stantcheva S, Yang D, Cutler D. Disparities in Coronavirus 2019 Reported Incidence, Knowledge, and Behavior Among US Adults. JAMA Netw Open.

2020;3(6):e2012403. doi:10.1001/jamanetworkopen.2020.12403 Link:

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2767261>

JAMA Otolaryngol Head Neck Surg: Mercante G, Ferrelli F, De Virgilio A, et al. Prevalence of Taste and Smell Dysfunction in Coronavirus Disease 2019. JAMA Otolaryngol Head Neck Surg. Published online June 18, 2020. doi:10.1001/jamaoto.2020.1155 Link:

<https://jamanetwork.com/journals/jamaotolaryngology/article-abstract/2767510>

Lancet Glob Health: Clark A, Jit M, Warren-Gash C, et al. Global, regional, and national estimates of the population at increased risk of severe COVID-19 due to underlying health conditions in 2020: a modelling study. Published: June 15, 2020 DOI:

[https://doi.org/10.1016/S2214-109X\(20\)30264-3](https://doi.org/10.1016/S2214-109X(20)30264-3) Link:

[https://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(20\)30264-3/fulltext](https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(20)30264-3/fulltext)

Lancet Infect Dis: Hung IF, Cheng VC, Li X, Tam AR, Hung DL, Chiu KH, Yip CC, Cai JP, Ho DT, Wong SC, Leung SS, Chu MY, Tang MO, Chen JH, Poon RW, Fung AY, Zhang RR, Yan EY, Chen LL, Choi CY, Leung KH, Chung TW, Lam SH, Lam TP, Chan JF, Chan KH, Wu TC, Ho PL, Chan JW, Lau CS, To KK, Yuen KY. SARS-CoV-2 shedding and seroconversion among passengers quarantined after disembarking a cruise ship: a case series. Lancet Infect Dis. 2020 Jun 12:S1473-

3099(20)30364-9. doi: 10.1016/S1473-3099(20)30364-9. Epub ahead of print. PMID: 32539986;

PMCID: PMC7292581. Link: [https://www.thelancet.com/journals/laninf/article/PIIS1473-](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30364-9/fulltext)

[3099\(20\)30364-9/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30364-9/fulltext)

Lancet Infect Dis: Tabata S, Imai K, Kawano S, Ikeda M, Kodama T, Miyoshi K, Obinata H, Mimura S, Kodera T, Kitagaki M, Sato M, Suzuki S, Ito T, Uwabe Y, Tamura K. Clinical characteristics of COVID-19 in 104 people with SARS-CoV-2 infection on the Diamond Princess cruise ship: a retrospective analysis. Lancet Infect Dis. 2020 Jun 12:S1473-3099(20)30482-5. doi: 10.1016/S1473-3099(20)30482-5. Epub ahead of print. PMID: 32539988; PMCID: PMC7292609.

Link: [https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(20\)30482-5/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30482-5/fulltext)

MMWR: Gold JAW, Wong KK, Szablewski CM, Patel PR, Rossow J, da Silva J, Natarajan P, Morris SB, Fanfair RN, Rogers-Brown J, Bruce BB, Browning SD, Hernandez-Romieu AC, Furukawa NW, Kang M, Evans ME, Oosmanally N, Tobin-D'Angelo M, Drenzek C, Murphy DJ, Hollberg J, Blum JM, Jansen R, Wright DW, Sewell WM 3rd, Owens JD, Lefkove B, Brown FW, Burton DC, Uyeki TM, Bialek SR, Jackson BR. Characteristics and Clinical Outcomes of Adult Patients Hospitalized with COVID-19 - Georgia, March 2020. MMWR Morb Mortal Wkly Rep. 2020 May 8;69(18):545-550. doi: 10.15585/mmwr.mm6918e1. PMID: 32379729. Link:

<https://www.cdc.gov/mmwr/volumes/69/wr/mm6925e1.htm>

Nature: Robbiani DF, Gaebler C, Mueschke F, et al. Convergent antibody responses to SARS-CoV-2 in convalescent individuals. Published online 18 June 2020. Nature (2020). <https://doi.org/10.1038/s41586-020-2456-9> Link: <https://www.nature.com/articles/s41586-020-2456-9>

NEJM: Byas DA, Eisenstein LG, Jones DS. Hidden in Plain Sight — Reconsidering the Use of Race Correction in Clinical Algorithms. N Engl J Med. June 17, 2020 DOI: 10.1056/NEJMms2004740 Link: <https://www.nejm.org/doi/full/10.1056/NEJMms2004740>

NEJM: Ellinghaus D, Degenhardt F, Bujanda L, et al. Genomewide Association Study of Severe Covid-19 with Respiratory Failure. N Engl J Med. June 17, 2020 DOI: 10.1056/NEJMoa2020283 Link: <https://www.nejm.org/doi/full/10.1056/NEJMoa2020283>

Phys Fluids: Dbouk T, Drikakis D. On respiratory droplets and face masks. Physics of Fluids 32, 063303 (2020); <https://doi.org/10.1063/5.0015044> Link: <https://aip.scitation.org/doi/10.1063/5.0015044>

Science: Baum A, Fulton BO, Wloga E, Copin R, Pascal KE, Russo V, Giordano S, Lanza K, Negron N, Ni M, Wei Y, Atwal GS, Murphy AJ, Stahl N, Yancopoulos GD, Kyratsous CA. Antibody cocktail to SARS-CoV-2 spike protein prevents rapid mutational escape seen with individual antibodies. Science. 2020 Jun 15:eabd0831. doi: 10.1126/science.abd0831. Epub ahead of print. PMID: 32540904. Link: <https://science.sciencemag.org/content/early/2020/06/15/science.abd0831>

In Brief

Aljazeera: Aljazeera News. 17 infected, 11 dead in new Ebola outbreak in DR Congo (15 June 2020). Link: <https://www.aljazeera.com/news/2020/06/17-infected-11-dead-ebola-outbreak-dr-congo-200615112609457.html>

AP: Associated Press. Maria Cheng and Christina Larson. Race for virus vaccine could leave some countries behind (18 June 2020). Link: <https://apnews.com/4b93252bb290874c7c295cd2cb1a620c>

CNN: CNN. Jen Christensen. Pharmaceutical company begins phase 3 trial of arthritis drug for Covid-19 patients (17 June 2020). Link: https://www.cnn.com/world/live-news/coronavirus-pandemic-06-17-20-intl/h_937ba00b6ccdea70382a618afce41331

CNN: CNN. Madeline Holcombe and Hira Humayun. Mississippi coronavirus cluster tied to fraternity rush parties (19 June 2020). Link: <https://www.cnn.com/2020/06/19/us/mississippi-coronavirus-fraternity-parties/index.html>

CNN: CNN. Wayne Sterling and Dr. Sanjay Gupta. Football may not happen at all this year, Fauci warns (18 June 2020). Link: <https://www.cnn.com/2020/06/18/us/football-happen-fauci-spt-trnd/index.html>

Medpage: Medpage Today. Elizabeth Hlavinka. Racial Bias in Flexner Report Permeates Medical Education Today (18 June 2020). Link:

<https://www.medpagetoday.com/publichealthpolicy/medicaleducation/87171>

NYT: New York Times. Joseph Goldstein. 'When Am I Coming Home?': A Tough Month Inside a Virus Recovery Unit (17 June 2020). Link:

<https://www.nytimes.com/2020/06/17/nyregion/coronavirus-recovery-hospital.html>

NYT: New York Times. John D. Tulenko. Soaring Sales for \$4,500 Puzzles? In a Lockdown, It All Fits (19 June 2020). Link: <https://www.nytimes.com/2020/06/19/nyregion/par-jigsaw-puzzles-lockdown.html>

ProMED: ProMED mail. Subject: PRO/AH/EDR> Plague - Congo DR (04): (IT) bubonic, septicemic, fatal. From: Anne Laudsoit. Date: 16 June 2020. Archive Number: 20200617.7480784 Link:

<https://promedmail.org/promed-post/?id=7480784>

ProPublica: ProPublica. Caroline Chen. How — and When — Can the Coronavirus Vaccine Become a Reality? (17 June 2020). Link: <https://www.propublica.org/article/how-and-when-can-the-coronavirus-vaccine-become-a-reality>

ProPublica: ProPublica. J. David McSwane and Ryan Gabrielson. The Trump Administration Paid Millions for Test Tubes — and Got Unusable Mini Soda Bottles (18 June 2020). Link:

<https://www.propublica.org/article/the-trump-administration-paid-millions-for-test-tubes-and-got-unusable-mini-soda-bottles>

Reuters: Reuters Health News. Kate Kelland. Italy sewage study suggests COVID-19 was there in December 2019 (19 June 2020). Link: [https://www.reuters.com/article/us-health-coronavirus-italy-sewage/italy-sewage-study-suggests-covid-19-was-there-in-december-2019-](https://www.reuters.com/article/us-health-coronavirus-italy-sewage/italy-sewage-study-suggests-covid-19-was-there-in-december-2019-idUSKBN23Q1J9)

[idUSKBN23Q1J9](https://www.reuters.com/article/us-health-coronavirus-italy-sewage/italy-sewage-study-suggests-covid-19-was-there-in-december-2019-idUSKBN23Q1J9)

STAT: STATnews. Andrew Joseph. Rising Covid-19 cases and hospitalizations underscore the long road ahead (17 June 2020). Link: <https://www.statnews.com/2020/06/17/rising-covid-19-cases-hospitalization-long-road/>

WashPo: Washington Post. Teddy Amenabar. When, why and how to wear a mask during this pandemic, according to the experts (18 June 2020). Link:

<https://www.washingtonpost.com/health/2020/06/18/face-mask-covid-coronavirus/>

WashPo: Washington Post. Gerry Shih. Beijing cuts flights, shuts schools as new coronavirus cases raise alarm (17 June 2020). Link:

https://www.washingtonpost.com/world/asia_pacific/beijing-cuts-flights-shuts-schools-as-new-coronavirus-cases-raise-alarm/2020/06/17/537dbe06-b069-11ea-98b5-279a6479a1e4_story.html

WashPo: Washington Post. Rachel Siegel. Hang on to your nickels and dimes, the pandemic has created a coin shortage (17 June 2020). Link:

<https://www.washingtonpost.com/business/2020/06/17/coin-shortage-economy-fed/>

WashPo: Washington Post. Adam Taylor. Beijing's new coronavirus outbreak carries an urgent message for the world (18 June 2020). Link:

<https://www.washingtonpost.com/world/2020/06/18/beijing-coronavirus-outbreak-meaning/>

Wired: Wired. Roxanne Khamisi. If the Virus Slows This Summer, It May Be Time to Worry (18 June 2020). Link: <https://www.wired.com/story/if-the-coronavirus-slows-this-summer-it-may-be-time-to-worry>